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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/872,077	06/01/2001	Lisa Amini	STL920000116US1	3841

24852 7590 10/20/2004

INTERNATIONAL BUSINESS MACHINES CORP  
IP LAW  
555 BAILEY AVENUE , J46/G4  
SAN JOSE, CA 95141

EXAMINER
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NALVEN, ANDREW L

ART UNIT	PAPER NUMBER
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2134

DATE MAILED: 10/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/872,077

Applicant(s)

AMINI ET AL.

Examiner

Andrew L Nalven

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 6/10/04 and 6/1/01.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. Claims 1-22 are pending.

#### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 2-3, 8-9, and 16-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The terms "strong encryption" in claims 2 and 8 and "weak encryption" in claims 3 and 9 are relative terms which renders the claim indefinite. The terms "strong encryption" and "weak encryption" are not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

#### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

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only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-4, 7-10, and 15-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Mitty et al US Patent No. 6,145,079. Mitty teaches a secure electronic transaction system using a trusted intermediary to perform electronic services.

6. With regards to claims 1, 7 and 15, Mitty teaches a data element being statically encrypted with a static key (Mitty, column 8 lines 48-51, M2 encrypted to form M3), a data element being dynamically encrypted with a dynamic key (Mitty, column 12 lines 14-23, M9 encrypted to form M10), and a data element being decrypted with a dynamic key and a static key (Mitty, column 12 line 61 – column 13 line 17, decrypts M10 and M3).

7. With regards to claims 2, 8, and 16(as best understood), Mitty teaches encryption with said static key being strong encryption (Mitty, column 8 lines 48-51).

8. With regards to claims 3, 9, and 17 (as best understood), Mitty teaches encryption with said dynamic key being weak encryption (Mitty, column 12 lines 14-23).

9. With regards to claims 4, 10, and 18, Mitty teaches a data element being encrypted with a static key on a first computer system (Mitty, column 8 lines 48-51, M2 encrypted to form M3, column 10 lines 9-16 intermediary receives package from sender), the data element being encrypted with the dynamic key on a second computer system (Mitty, column 12 lines 14-23, M9 encrypted to form M10 by intermediary computer system), and the data element being decrypted with the static key and dynamic key on a third computer system thereby encryption and decryption are

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distributed between the first, second, and third computer systems (Mitty, column 12 line 61 – column 13 line 17, recipient/3<sup>rd</sup> computer system decrypts M10 and M3).

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mitty et al US Patent No. 6,145,079.

12. With regards to claim 5, Mitty fails to teach the second computer being untrusted. Examiner contends that untrusted computers are well known in the art and it would have been obvious to a person of ordinary skill in the art to allow Mitty's system to work with untrusted computers because it offers the advantage of allowing interoperability with a far wider range of networks and systems.

13. Claims 6, 11, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mitty et al US Patent No. 6,145,079 in view of Bailey III US Patent No. 5,659,614.

14. With regards to claims 6, 11, and 19, Mitty teaches a data element being encrypted with a static key and a dynamic key on a first computer system (Mitty, column 8 lines 48-51, M2 encrypted to form M3, column 9 lines 25-47 encrypted M5 to form

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M6), but fails to teach the data element being decrypted by the same dynamic key on a second computer system. Bailey teaches the data element being decrypted with the static key and the dynamic key on a second computer system (Bailey, column 6 lines 9-21, column 18 lines 53-55). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize Bailey's method with Mitty's secure transaction system because it offers the advantage of helping ensure an attacker cannot decrypt data by acquiring a single key during a transmission from a source to destination (Bailey, column 6 lines 8-21).

15. Claims 12-13 and 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mitty et al US Patent No. 6,145,079 in view of Koopman Jr. et al Re 36,181. Koopman teaches a pseudorandom number generation system with cryptographic authentication.

16. With regards to claims 12-13 and 20-21, Mitty teaches the determination of whether a transmission failed (Mitty, column 6 lines 30-56, confirmation messages), but fails to teach the repairing of the data element without retransmission. Koopman teaches the repairing of the data element without retransmission (Koopman, column 16 lines 44-56). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize Koopman's correction method with Mitty's secure transaction system because it offers the advantage of ensuring that received data is correct and helping prevent attacks through repetitive application of numbers towards a receiver (Koopman, column 16 lines 44-56).

17. Claims 14 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mitty et al US Patent No. 6,145,079 and Bailey III US Patent No. 5,659,614 as applied to claims 11 and 19 above, and further in view of Koopman Jr. et al Re 36,181.

18. With regards to claims 14 and 22, Mitty as modified teaches the determination of whether a transmission failed (Mitty, column 6 lines 30-56, confirmation messages), but fails to teach the repairing of the data element without retransmission. Koopman teaches the repairing of the data element without retransmission (Koopman, column 16 lines 44-56). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize Koopman's correction method with Mitty's modified secure transaction system because it offers the advantage of ensuring that received data is correct and helping prevent attacks through repetitive application of numbers towards a receiver (Koopman, column 16 lines 44-56).

### ***Conclusion***

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

20. Wiser et al US Patent No. 6,385,596 discloses a secure online music distribution system.

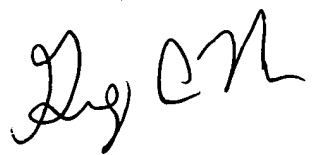
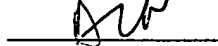
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21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew L Nalven whose telephone number is 703 305 8407. The examiner can normally be reached on Monday - Thursday 8-6, Alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Morse can be reached on 703 308 4789. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Andrew Nalven



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